



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/677,468

10/02/2003

Walid N. Aboul-Hosn

9261.16661-PCT US DIV

8496

36154 7590 12/24/2008
LAW OFFICE OF ALAN W. CANNON
942 MESA OAK COURT
SUNNYVALE, CA 94086

EXAMINER

NGUYEN, CAMTU TRAN

ART UNIT

PAPER NUMBER

3772

MAIL DATE

DELIVERY MODE

12/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/677,468	Applicant(s) ABOUL-HOSN ET AL.	
	Examiner Camtu T. Nguyen	Art Unit 3772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☐ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413) |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) ☐ Information Disclosure Statement(s) (PTO/SB/08) | 5) ☐ Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

Response to Amendment & Arguments

This Office Action is responding to applicant's amendment filed on 8-14-2008.

Applicant's response to the drawings Objections are noted, thus, such objection has been withdrawn.

Applicant's response to the 112, 1st & 2nd paragraphs are noted and deemed persuasive, thus, those rejections have also been withdrawn.

Applicant's comments directed to the Watkins et al reference are acknowledged and deemed persuasive; particularly, since the Watkins et al device does not enter into the left atrium it does not meet the claims as presented. Therefore, its rejection has been withdrawn.

The claims, however, are not allowable in view of the following rejection(s).

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the hemostatic seal sealing the opening of the fluid delivery conduit must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

Art Unit: 3772

number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang (U.S. Patent No. 6,106,497).

Wang discloses a system and method for preventing an air embolism in a surgical procedure, the system comprising a removal tube (18) for transporting blood from the left ventricle (33) to a heart-lung machine (24), the conveying tube (14) for transporting

Art Unit: 3772

(CO₂) into the left atrium (54) and the conveying tube (14) is connected to a fluid source (10), the conveying tube (14) further including a valve (46) for closing the opening of the conveying tube (14).

With are regards claim 2 reciting the blood pump, the heart-lung machine (24) is a cardiac bypass machine, which is well known to inherently including at least a pump.

With regards to claims 3 & 4, delivering fluid inherently performing the steps of these claims.

With regards to claim 6, see Figure 1.

With regards to the claim 2 reciting the hemostatic seal/valve (46) & opening of the conveying tube/conduit (14) receiving the intake cannula/tube (18) and to claim 5 reciting the intake cannula/tube (18) in coaxial within the conveying tube/conduit (14), specifically for these structures to be entitled to weight, such structural limitations must affect the method in a manipulative sense and not mount to mere claiming of use of their structure. Ex Parte Pfeiffer 782 OG 639, 1962 CD 408.

The Wang system would perform applicant claimed method.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (U.S. Patent No. 6,106,497).

Wang discloses a system and method for preventing an air embolism in a surgical procedure, the system comprising a removal tube (18) for transporting blood from the left ventricle (33) to a heart-lung machine (24), the conveying tube (14) for transporting (CO₂) into the left atrium (54) and the conveying tube (14) is connected to a fluid source (10),

With regards to claim 2 reciting the hemostatic seal for sealing opening of the conduit, the Wang reference discloses the conveying tube/conduit (14) further including a hemostatic seal/valve (46) for closing the opening of the conveying tube/conduit (14).

With regards to claim 2 reciting the fluid (fluid source), by definition, a fluid is a substance, as a fluid or gas (dictionary.com). Furthermore, applicant's specification discloses suitable fluids (liquids and/or gases), including but not limited to carbon dioxide (page 9 lines 2-6). On that note, the Wang's fluid is consistent with applicant's definition.

With regards to claim 2 reciting the intake cannula introduced through hemostatic seal and the opening of the fluid delivery conduit, the Wang's removal tube (18) is not introduced through the hemostatic seal/valve (46), however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to position the hemostatic seal/valve (46) at junction (44) such that the removal tube (18) is introduced through the hemostatic seal/valve (46) for purposes of strengthening the junction (44), since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

With are regards claim 2 reciting the blood pump, the heart-lung machine (24) is a cardiac bypass machine, which is well known to inherently including at least a pump.

With regards to claims 3 & 4, delivering fluid inherently performing the steps of these claims.

With regards to claim 6, see Figure 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camtu T. Nguyen whose telephone number is 571-272-4799. The examiner can normally be reached on (M-F) 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on 571-272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Camtu T. Nguyen/
Examiner, Art Unit 3772

